9. A projection screen according to claim 8, wherein the low-refractive-index layers comprise SiO_2 or MgF_2.

10. A projection screen according to claim 1, further comprising a light absorption layer for absorbing light transmitted through the optical thin film.

11. A projection screen according to claim 10, wherein the light absorption layer contains a black paint.

12. A projection screen according to claim 11, wherein the substrate functions as the light absorption layer.

13. A projection screen according to claim 12, wherein the substrate comprises a macromolecular material.

14. A projection screen according to claim 13, wherein the macromolecular materials is selected from the group consisting of polycarbonate, polyethylene terephthalate, polyethylene naphthalate, polyether sulfone, and polyolefin.

15. A projection screen according to claim 1, wherein the projection light is a laser beam.

16. A projection screen according to claim 1, wherein the specific wavelength band includes a red wavelength band, a green wavelength band, and a blue wavelength band.

17. A method for manufacturing a projection screen on which an image is displayed by receiving projection light, the method comprising the steps of:

forming a light diffusion control portion having a plurality of convex portions or concave portions on the surface of a substrate; and

forming an optical thin film on the light diffusion control portion so as to have convex portions or concave portions having the same shape as that of the convex or concave portions of the light diffusion control portion, the optical thin film reflecting light in a specific wavelength band and transmitting at least visible light other than the light in the specific wavelength band.

18. A method for manufacturing a projection screen according to claim 17, wherein the light diffusion control portion is formed by processing the substrate.

19. A method for manufacturing a projection screen according to claim 18, wherein the light diffusion control portion is designed by an optical simulation so that the convex portions or concave portions of the light diffusion control portion determine the angle of light reflection from the optical thin film.

20. A projection screen according to claim 19, wherein the convex portions or concave portions of the light diffusion control portion have spherical surfaces.

21. A method for manufacturing a projection screen according to claim 17, wherein the step of forming the light diffusion control portion comprises the sub steps of: forming a plurality of spherical beads having a predetermined diameter; and forming a bead-fixing layer between the beads to fix the beads.

22. A method for manufacturing projection screen according to claim 21, wherein the thickness of the bead-fixing layer is set with respect to the diameter of the beads, thereby determining the angle of reflection from the optical thin film.

23. A method for manufacturing a projection screen according to claim 17, wherein the optical thin film comprises a dielectric laminate including alternately laminated high-refractive-index layers and low-refractive-index layers, and the thickness of each layer of the dielectric laminate is in the range of 80 to 200 nm.

24. A method for manufacturing a projection screen according to claim 23, wherein the high-reflective-index layers are formed of a material selected from the group consisting of Nb_2O_5, TiO_2, and Ta_2O_5.

25. A method for manufacturing a projection screen according to claim 24, wherein the low-refractive-index layers are formed of SiO_2 or MgF_2F_2.

26. A method for manufacturing a projection screen according to claim 17, further comprising the step of forming a light absorption layer for absorbing light transmitted through the optical thin film.

27. A method for manufacturing a projection screen according to claim 26, wherein the light absorption layer contains a black paint.

28. A method for manufacturing a projection screen according to claim 27, wherein the substrate functions as the light absorption layer.

29. A method for manufacturing a projection screen according to claim 28, wherein the substrate is formed of a macromolecular material.

30. A method for manufacturing a projection screen according to claim 29, wherein the macromolecular material is selected from the group consisting of polycarbonate, polyethylene terephthalate, polyethylene naphthalate, polyether sulfone, and polyolefin.

31. A method for manufacturing a projection screen according to claim 17, wherein the specific wavelength band includes a red wavelength band, a green wavelength band, and a blue wavelength band.

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